Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

_____

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

_____

Ex parte EMIL SIMMLER
and THOMAS SIMMLER

_____

Appeal No. 1998-1754
Application 08/555,918

_____

HEARD: APRIL 24, 2001

_____

Before GARRIS, WALTZ and PAWLIKOWSKI, Administrative Patent Judges.

PAWLIKOWSKI, Administrative Patent Judge.

## DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 1-11. Claims 1, 7, and 11 are representative of the subject matter on appeal, and are reproduced in the attached appendix.

The references relied upon by the examiner are:

| | | |
|---|---|---|
| Dales | 2,295,030 | Sept. 8, 1942 |
| Keskkula et al. (Keskkula) | 3,165,434 | Jan. 12, 1965 |
| Henry et al. (Henry) | 3,770,572 | Nov. 6, 1973 |
| Hadgraft et al. (Hadgraft) | 3,779,857 | Dec. 18, 1973 |
| Kunishige et al. (Kunishige) | 4,750,963 | June 14, 1988 |

Claims 1-3, 5, 7, and 9-11 stand rejected as being unpatentable for obviousness under 35 U.S.C. ' 103 over Henry in view of Dales.

Claim 4 stands rejected as being unpatentable for obviousness under 35 U.S.C. ' 103 over Henry in view of Dales and Keskkula.

Claim 6 stands rejected as being unpatentable for obviousness under 35 U.S.C. ' 103 over Henry in view of Dales and Hadgraft.

Claim 8 stands rejected as being unpatentable for obviousness under 35 U.S.C. ' 103 over Henry in view of Dales and Kunishige.

## OPINION

For the reasons set forth in appellants' brief and below, we will reverse each of the above-noted rejections.

It is not disputed that the Henry reference lacks the use of boric acid in the disclosed laminating adhesive. (Brief, page 9, Office action mailed September 27, 1996, page 5). The examiner relies upon the Dales reference for the use of boric acid as a gelling agent. (Office action mailed September 27, 1996, pages 5-6).

Appellants argue that Dales' neoprene dispersion (to which Dales adds the boric acid) is used for forming molded articles, and not for use in an adhesive. (Brief, pages 9-10). Appellants further state that there is no basis for the examiner's conclusion that one of ordinary skill in the art would recognize, from a reading of Dales, that one could improve the initial adhesion force properties of a dispersion comprising an acrylic acid ester copolymer and a colloidal chloroprene polymerisate, by adding boric acid to the dispersion. (Brief, page 11).

The examiner states that it would have been obvious to one of ordinary skill in the art to have incorporated the known gelling agent of Dales (boric acid) into the gellable composition of Henry. The examiner states that column 1, lines 41-42 and column 5, lines 1-2 and 20-22 of Dales are in apparent agreement with appellants' disclosure at page 4, lines 24-27. (Answer, page 5).

We find that page 4, lines 24-27 of appellants' specification discloses that the addition of boric acid improves the initial adhesion force of a sprayable dispersion, even after a longer ventilation time. It appears the examiner equates this disclosure with Dales' disclosure of "in a short time the mass sets to a gel", and "gelling agent", and "gelation", found in Dales at column 1, lines 41-42 and at column 5, lines 1-2 and 20-22.

We do not agree with the examiner that such disclosures are in agreement with each other. Dales concerns gelation of an aqueous dispersion, whereas appellants' invention concerns the initial adhesion of a dispersion adhesive. The initial adhesion of the dispersion adhesive is described in appellants' specification, on page 8, line 10 through page 10, line 20. Dales does not disclose or teach such initial adhesion of a dispersion adhesive as defined by appellants' specification.

The examiner also states that Dales discloses that the boric acid agent is quick acting and refers to column 1, lines 41-42 of Dales, and that such is sufficient suggestion to combine with Henry. (Answer, pages 6-7). Again, we cannot find how such disclosure in Dales adequately arrives at appellants' claimed invention, in light of appellants' specification on page 8, line 10 through page 10, line 20.

We also find that Dales involves an aqueous dispersion of neoprene, having soluble abietates and soluble hydroabietates as dispersing agents, stabilized with ammonia (or its equivalent). This aqueous dispersion may be gelled by contact with boric acid, to form a mold. See column 1, lines 30-36 and column 4, lines 25-49 of Dales. Neoprene is defined in Dales as a "polymerized 2-chloro-1,3-butadiene" (column 1, lines 19-20).

On the other hand, we find that Henry involves an aqueous dispersion of a mixture of a polymer of ethylene and an elastomeric polymer of at least one monomer that can be chloroprene. See column 2, lines 3-44, column 3, lines 10-68, and column 4, lines 1-68. Thickening agents can also be employed. See column 11, lines 66-68, column 12, lines 1-20.

The composition of Henry therefore differs from the composition of Dales. Moreover, Henry concerns use of a laminating adhesive in the manufacture of laminates, while Dales concerns formation of a molded product.

Yet, the examiner believes that the combination of Henry in view of Dales is "proper and tenable". (Answer, page 7). We cannot agree, given the disparate subject matter of each of these references.

Accordingly, the examiner has failed to make a *prima facie* case of obviousness.

We need not consider the tertiary references of Keskkula, Hadgraft, and Kunishige because these references were not relied upon by the examiner to cure the aforementioned deficiencies of the combination of Henry in view of Dales. The rejections of the dependent claims cannot be sustained because of the aforementioned deficiencies.

**REVERSED**

| | |
|---|---|
| Bradley R. Garris | ) |
| Administrative Patent Judge | ) |
| | ) |
| | ) |
| | ) BOARD OF PATENT |
| Thomas A. Waltz | ) |
| Administrative Patent Judge | ) APPEALS AND |
| | ) |
| | ) INTERFERENCES |
| | ) |
| Beverly Pawlikowski | ) |
| Administrative Patent Judge | ) |

BAP/cam

## APPENDIX

1. Sprayable dispersion comprising an acrylic acid ester copolymer and a colloidal chloroprene polymerisate, said dispersion further characterised in that it contains an amount of boric acid sufficient to improve the initial adhesion force properties of the dispersion.

7. Process for elastic adhesion of two substrate surfaces, at least one of which is porous in structure, comprising the steps of: applying a dispersion comprising an acrylic acid ester copolymer and a colloidal chloroprene polymerisate and further comprising boric acid in an amount sufficient to improve the initial adhesion force properties of the dispersion to at least one of the substrate surfaces, and gluing the substrate surfaces together by laying said surfaces together wet and pressing said surfaces together with at least 0.1 $N/cm^2$ for at least approximately 0.5 seconds.

11. A sprayable dispersion for bonding two substrate surfaces together, said dispersion comprising an acrylic acid ester copolymer and a colloidal chloroprene polymerisate, said acrylic acid ester copolymer and said chloroprene polymerisate being present in a weight ratio of the acrylic acid ester copolymer to the chloroprene polymerisate of 1:10 to 1.5:1 and said dispersion further comprising from about 0.1 to 10% by weight of boric acid to improve the initial adhesion force properties of the dispersion.

Bachman and Lapointe
Suite 1201
900 Chapel Street
New Haven, CT 06510-2802